Arsenic mine tailings and health

Summary

- Dust and soil from mine tailings often contain arsenic, so keep exposure to a minimum.
- Health effects depend on the amount of arsenic taken in by the body over time and the amount of arsenic swallowed.
- Children are more at risk as they can swallow more soil or dust than adults.
- See your doctor if you have any concerns.

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Arsenic is a substance found in the environment. It occurs naturally in crushed rock. It is often found near gold deposits and is extracted as part of gold and other mining activities. The waste left over after mining processes is called mine tailings. Mine tailings often look like fine clay or sand and commonly contain raised levels of arsenic.

Many towns and cities in Victoria have been built in areas with a history of gold mining. Mine tailings that contain arsenic are spread over large areas of land, including land now used for housing.

Health effects of arsenic

Arsenic is a well-known poison, but its effects on health depend on its form and the total amount taken in by the body over time. For instance:

- Large amounts of arsenic – taken in over a short time, can cause severe health effects including stomach ache, nausea, vomiting, damage to blood cells and nerves, or even death.
- Medium amounts of arsenic – taken in over a longer time, may cause skin changes, damage to major body organs and some types of cancers.
- Small amounts of arsenic – can be taken in over long periods of time without any obvious health effects.

Arsenic may be breathed in or swallowed

Small amounts of arsenic are found naturally in soil, air, food and water. It usually enters the body via food and water. Arsenic may be breathed in when it is present in fine dust, but it is not well absorbed through the skin. In areas with mine tailings, you can be exposed to extra arsenic from swallowing and breathing in dust and soil from mine tailings.

Young children are at risk from arsenic in mine tailings

Young children are more at risk than adults from exposure to arsenic in mine tailings. This is because young children can swallow more dust and soil from crawling and putting their fingers or toys in their mouths.

Preventing exposure to arsenic in mine tailings

Children and adults who live near mine tailings are at a higher risk of exposure to arsenic. The risk can be reduced if you:

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• Reduce your exposure to mine tailing soil and dust (for example, reduce dust in homes near mine tailings by cleaning frequently).
• Do not allow young children to play in or eat soil from mine tailings.
• Wash young children’s hands and toys frequently.
• Bring in clean soil for vegetable garden beds and ensure all fruit and vegetables are washed thoroughly before eating.
• Do not swim in dams with walls made from mine tailings.

Where to get help

• Your doctor
• Your local council
• Environment Protection Authority Tel. (03) 9695 2722

Things to remember

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• Health effects depend on the amount of arsenic taken in by the body over time and the amount of arsenic swallowed.
• Children are more at risk as they can swallow more soil or dust than adults.
• See your doctor if you have any concerns.